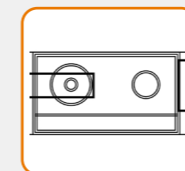


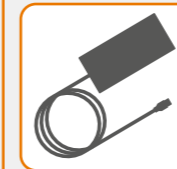
2 Unpack the Spectrograph

Spectrograph



Shamrock 500i or 750 Spectrograph (model as ordered)

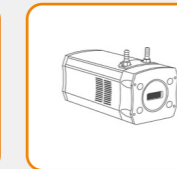
Accessories



Power Supply



USB 2.0 Cable Type A to Type B (3 m)



Camera(s) (when applicable)



Documentation scan or visit: andor.oxinst.com/welcome



Software (copy supplied)



Hex Key Set

Please follow these guidelines when unpacking the Shamrock:

1. The Shamrock should be placed in the environment it will be used in for a few hours before adjustment and first use.
2. Environment should be dust free.
3. Spectrograph should be placed on a flat, stable support (e.g. optical table); Shamrock feet are designed to be secured on an optical table with appropriate screws.

The Shamrock 500i or 750 can be supplied with a range of accessories as specified at the time of ordering. Please check the supplied items against the packing list to ensure all items are present.

1 Prepare your Facility



Handle the spectrograph and accessories with care.



Use correct power supply and cables.



Observe anti-static precautions when installing the spectrograph, camera and accessories.



Operate at a constant temperature between 0°C and 30°C (temperature fluctuation during operation may result in calibration drift). Store between -25°C and 50°C.



Ensure sufficient clearance around spectrograph and power supply vents (Do **not** block vents when operating on benchtop).



Please observe the following warning when lifting the spectrograph:



Operation of the spectrograph close to intense pulsed sources (e.g. plasma and X-ray sources) may compromise performance.



Keep dry, <70% humidity non-condensing.

Refer to the user manual for further information

3 Install Software (SDK2 or Solis)

You must have administrator access on your PC to perform this installation.

These instructions cover installation of both Andor Solis and Andor SDK if ordered. A copy of the software is provided within the spectrograph box. Additionally, the latest software files are available to download on request, please sign in or create an account at andor.oxinst.com/downloads

Windows: Switch on the PC, run the setup exe from the supplied copy or the downloaded file: e.g. AndorSDK2Setup-<version>.exe

1. Confirm the version of software (minimum is v2.1.x).
2. Follow the on screen prompts.
3. Select the installation directory when prompted.
4. If prompted for select the required hardware (spectrograph and/or camera) type.
5. On the final window click on "Install". Continue to follow the on screen prompts.


Shamrock will require SDK2 or Solis installation, please see quick start guide for specific camera model software requirements.

Online access to technical documentation is available at: andor.oxinst.com/downloads




4 Set up the Shamrock Spectrograph

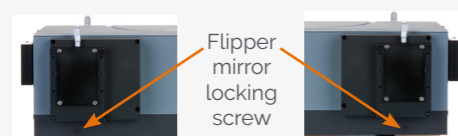
Refer also to the Shamrock 500i and 750 user guide

 Ensure that the power to the spectrograph is turned off and ensure that the switch on the rear of the spectrograph is set to OFF

 Remove the Flipper Mirror locking screws

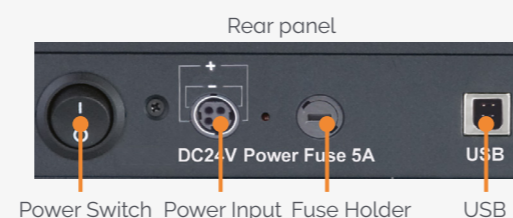
 For dual output and/or input configurations, the locking screws must be removed before turning on your Andor Shamrock spectrograph.

- 500 model - There are locking screws located as shown in the following figures:
- 750 model - The flipper mirror locking screws are located on the underside of the unit. Carefully tilt or lift the Shamrock to allow access.



Connect the Power and USB Cables

1. Ensure the power to the spectrograph is turned off and ensure that the switch on the rear of the spectrograph is set to OFF (O).
2. Connect the power cable to the power supply input on the rear panel of the spectrograph.
3. Connect the USB cable to the USB input on the rear panel of the spectrograph.
4. Connect the other end of the USB cable to an available USB connection on the PC.
5. Plug in the power supply to the mains, but do not switch the power on.



5 Connect the Camera

A pre-aligned camera and spectrograph package comes pre-fitted with a flange. For a standalone spectrograph, the unit is supplied with a camera flange, the camera must be attached to the flange and the flange attached to the spectrograph body with the screws supplied. Please see the spectrograph user guide for mounting information.

 Ensure that the camera AND the PC are switched OFF.

Connect the Camera to the PC

Depending on the camera model supplied there are three types of possible connectivity between the camera and the PC:

- USB 2.0 or 3.0
- Cameralink

Please refer to the Quick Start Guide provided with the Andor camera for full installation directions applicable to the specific camera model.

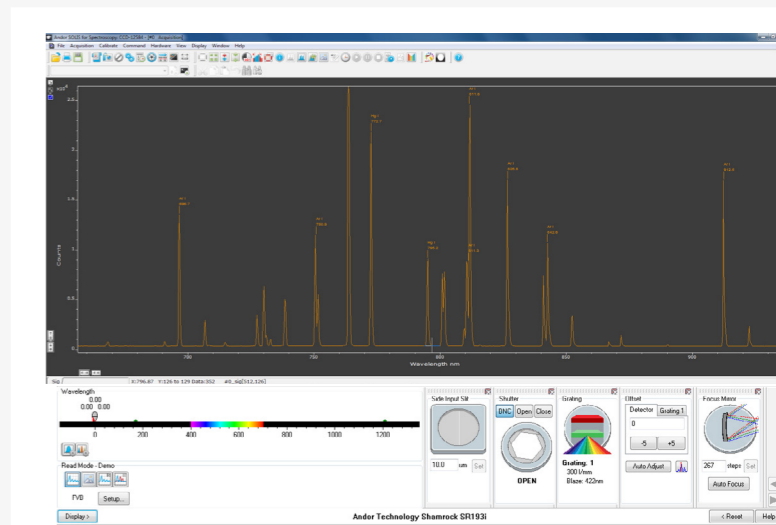
Note that if camera is ordered for the second output port, it will arrive detached and the attachment procedure as per user manual must be followed.

Online access to technical documentation is available at: andor.oxinst.com/downloads

6 Set up Solis on the Shamrock 500i & 750

Configuring Solis for the Shamrock

1. Power on the Shamrock and if appropriate the detector and wait until the short start-up tone signals it has finished system checks.
2. Start Solis.
3. Solis will auto detect the Shamrock and show a dialog on startup alerting the user of this.
4. Once fully loaded the Spectrograph control UI will show with the auto detected peripheral controls.
5. Please refer to your camera and Shamrock user manuals for any further setup or calibration steps required before using your system.



Above Accessories are automatically detected and displayed in the Solis software.

? Troubleshoot

Spectrograph is not recognised by Solis

- Ensure that the Shamrock has finished its system checks before attempting to connect with it. Check the connections between the camera, PC and spectrograph.

Camera is not recognised by PC

- Check that the camera power and USB cable are connected securely and the mains power cable is inserted.
- Check that the drivers have been installed properly (Control Panel /System/Hardware /Device Manager /Imaging Devices).

Shutter is not opening

- The shutter should always be controllable open/closed in the Solis GUI (when shutter is present). When the I²C cable or the BNC input is used, the 'BNC' option should be selected in the software to enable operation of all shutter modes.
- Check opening/closing times have been properly setup.

Communication error when selecting side port

- When shipping, a locking screw is used to secure the flipper mirror in dual exit systems. This needs to be loosened fully/removed before use.

Please see the Hardware Guide for further information on Troubleshooting.

Online access to technical documentation is available at: andor.oxinst.com/downloads